2006

Virginia Department of Transportation Daily Traffic Volume Estimates Including Vehicle Classification Estimates

where available

Special Locality Report 119

Town of Marion

Information in this report is included in Report

86

(Smyth County)

Prepared By

Virginia Department of Transportation Traffic Engineering Division

In Cooperation With

U.S. Department of Transportation Federal Highway Administration

Virginia Department of Transportation Traffic Engineering Division Traffic Monitoring Section

The Virginia Department of Transportation (VDOT) conducts a program where traffic count data are gathered from sensors in or along streets and highways and other sources. From these data, estimates of the average number of vehicles that traveled each segment of road are calculated. VDOT periodically publishes booklets listing these estimates.

One of these booklets, titled "Average Daily Traffic Volumes with Vehicle Classification Data, on Interstate, Arterial and Primary Routes" includes a list of each Interstate and Primary highway segment with the estimated Annual Average Daily Traffic (AADT) for that segment. AADT is the total annual traffic estimate divided by the number of days in the year. This booklet also includes information such as estimates of the percentage of the AADT made up by 6 different vehicle types, ranging from cars to double trailer trucks; estimated Annual Average Weekday Traffic (AAWDT), which is the number of vehicles estimated to have traveled the segment of highway during a 24 hour weekday averaged over the year; as well as Peak Hour and Peak Direction factors used by planners to formulate design criteria.

In addition to the Primary and Interstate publication, one hundred books are published periodically, one for each of 100 areas across the state defined by VDOT for record-keeping purposes. These books include traffic volume estimates for roads within the county, cities, and towns within the area. These books are titled "Daily Traffic Volumes Including Vehicle Classification Estimates, where available; Jurisdiction Report numbers 00 through 99".

Also available are a number of reports summarizing the average Vehicle Miles Traveled (VMT) in selected jurisdictions and other categories of highways. There are many different ways to present traffic volume summary information. Because the user determines the value of each presentation, the reports have been redesigned based on user requests and feedback. The people of the VDOT Traffic Engineering Division Traffic Monitoring Section who produce these books welcome requests for other helpful ways of presenting the summary information.

A compact disc (CD) is available that includes files in the Adobe® Portable Document Format (PDF) that can be displayed, searched, and printed using common desktop computer equipment. The CD includes the publications described above as well as a number of other reports, including specialized VMT summaries and smaller AADT reports for each city and town separately.

Publication Notes

Parallel Roads

For road inventory and management purposes, some roadways are counted separately by direction and have separately published traffic estimates for each direction of travel. Examples of such roadways are the interstate system and routes with separated facilities and (usually) one-way traffic facilities in urban areas. In these publications, they are referred to as parallel roads. As a convenience for the users of the publication, the listing for segments of roads with parallel segments are published with both the traffic estimates for their own direction of travel (e.g. I-95 Northbound) as well as the estimate of the total of all traffic on the same route including parallel roadways (all directions of I-95). The publication will have a "Combined Traffic Estimates for Parallel Roadways on this Route" or "Combined Traffic" identifiers for the combined direction of travel estimates.

Roadways such as I-395 with a North segment, a South segment and a separate Reversible lane segment will have the estimate for more than two parallel roadways included in the entire combined traffic estimate.

Some routes have very complicated paths through cities and towns. These parallel paths may be too complex to allow a relationship between nearby sections of the opposite direction on the same route. In this case, to indicate that the traffic estimates for such a road segment may not include all directions of traffic on that route, the line that would list the combined values will indicate "NA" for not available.

VDOT's traffic monitoring program includes more than 100,000 segments of roads and highways ranging from several mile sections of Interstate highways to very short sections of city streets. Due to problems experienced obtaining some traffic count data, and the level of quality necessary to maintain confidence in the data, no estimate is currently available for some segments of roadway. These segments are included in the publications indicating "NA" for not available. It is the intention of the VDOT Traffic Engineering Division Traffic Monitoring group to obtain the data necessary and to report traffic volume estimates on all road segments included in these publications.

Many of the road segments in this program are local secondary roads. The amount and detail of data collected on these roads are not as great as the data collected on higher volume roads. The vehicle classification, average weekday traffic volumes, and the theoretical design hour traffic volumes are not calculated for these roads. The publications indicate "NA" for the information that is not available.

This publication is based on a traffic monitoring program initiated in 1997. Because the data collection techniques and statistical evaluation processes are different than those used in previous years, comparison with previous publications may be misleading.

Glossary of Terms:

Route: The Route Number assigned to this segment of roadway with the master inventory route number if this is an overlapping route, with official street or highway name if available.

Length: Length of the traffic segment in miles.

AADT: Annual Average Daily Traffic. The estimate of typical daily traffic on a road segment for all days of the week, Sunday through Saturday, over the period of one year.

QA: Quality of AADT:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- F Factored Short Term Traffic Count Data
- G Factored Short Term Traffic Count Data with Growth Element
- H Historical Estimate
- M Manual Uncounted Estimate
- N AADT of Similar Neighboring Traffic Link
- O Provided By External Source
- R Raw Traffic Count, Unfactored

4Tire: Percentage of the traffic volume made up of motorcycles, passenger cars, vans and pickup trucks.

Bus: Percentage of the traffic volume made up of busses.

2Axle Truck: Percentage of the traffic volume made up of 2 axle single unit trucks (not including pickups and vans).

3+Axle Truck: Percentage of the traffic volume made up of single unit trucks with three or more axles.

1Trail Truck: Percentage of the traffic volume made up of units with a single trailer.

2Trail Truck: Percentage of the traffic volume made up of units with more than one trailer.

QC: Quality of Classification Data:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- C Short Term Classified Traffic Count Data
- F Factored Short Term Traffic Count Data
- H Historical Estimate
- M Mass Collective Average
- N Classification Estimates of Similar Neighboring Traffic Link

K Factor: The estimate of the portion of the traffic volume traveling during the peak hour or design hour.

QK: Quality of the K Factor estimate:

- A Factor based on 30th Highest Hour Observed During at least 250 days of Continuous Traffic Data
- B Factor based on other Hour Observed During Less than 250 days of Continuous Traffic Data
- F Factor based on Highest Hour Collected at in a 48 Hour Weekday Period
- M Factor based on Manual Estimate of design hour
- N Design Hour Factor (K Factor) of Similar Neighboring Traffic Link
- O Provided by External Source

Dir Factor: The estimate of the portion of the traffic volume traveling in the peak direction during the peak hour..

AAWDT: Average Annual Weekday Traffic. The estimate of typical traffic over the period of one year for the days between Monday through Thursday inclusive.

QW: Quality of AAWDT:

- A Average of Complete Continuous Count Data
- B Average of Selected Continuous Count Data
- F Factored Short Term Traffic Count Data
- G Factored Short Term Traffic Count Data with Growth Element
- M Manual Uncounted Estimate
- N AAWDT of Similar Neighboring Traffic Link
- O Provided by External Source

Year: Year for which the published values are appropriate. If the Quality of AADT (QA) is "R", the year is the year that the raw traffic count was collected, and if available,

Route Shield Legend

Route Systems

North 81	Interstate Route	Traffic volume data for Interstate Routes and some other routes are reported separately by direction, as well as combined.
29	US Route	
7	Virginia State Rou	te
(F241)	Frontage Road (F	precedes frontage route number)
(600)	Secondary Route	

Special Routes

Bus	Bus - Business Route	
29	Bypas - Bypass Route	
	Truck - Truck Route	
ALT	ALT - Alternate Route	
(220)	Wye - Wye Route connector	

- P Parallel Route; Southbound or Westbound direction lanes of a numbered route where they are on a different road facility than the other direction.
- The VDOT Maintainenance Jurisdiction number is displayed below the Secondary Route Number if the Maintenance Jurisdiction is different than the jurisdiction in the title of the report.

Virginia Department of Transportation Traffic Engineering Division

2006 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Marion

Davida	Linda di adam	L a sauth - A	4DT 04	4	D		Tru	ck		-00	K	01/	Dir	4.4V4/DT	
Route	Jurisdiction	Length A	ADI QA	411re	Bus	2Axle	3+Axle	1Trail	2Trail	QC	Factor	QK	Factor	AAWDT	QI
~~	From:				407		201					_			
11) S Main St	Town of Marion	0.52 8	3600 G	98%	1%	1%	0%	0%	0%	С	0.083	F	0.611	9400	G
~~	To: From:														
11) S Main St	Town of Marion	0.40 8	3800 G	98%	1%	1%	0%	0%	0%	F	0.083	F	0.599	9600	(
~ ~	To: From:	Ande	lerson St												
11 Main St	Town of Marion	0.41 9	9200 G	98%	1%	1%	0%	0%	0%	F	0.080	F	0.528	10000	(
~	AADT AATT Bus 2Axel 37-Ade 1Trail 2Trail Cr Factor C														
11 (16) Main St	Town of Marion	0.08 14	4000 G	98%	1%	1%	0%	0%	0%	F	0.079	Ν	0.593	14000	(
\sim	Tax	East	Main St												
11) (16) Main St				98%	1%	1%	0%	0%	0%	F	0.079	F	0.593	17000	
	To:	110 4453 Chath	nam Hill Dd: Lae	St											
11) (16) Main St	110111				1%	1%	0%	0%	0%	С	0.081	F	0.546	19000	
11) (10)	T				.,,		0,0	0,0	0,0		0.00.	-	0.0.0	.0000	
11 N Main St	Town of Marion			97%	1%	1%	0%	1%	0%	F	0.092	F	0.54	14000	
11) N Main St	1 GWT GT WATER			37 70	170		070	1 /0	070		0.032	•	0.54	14000	
N Main Ct	To:			070/	40/	40/	00/	40/	00/		0.404		0.544	40000	
N Main St				97%	1%	1%	0%	1%	0%	C	0.104	F	0.544	12000	
S Commerce Street				089/	10/	10/	00/	∩0/:	09/	_	NΙΛ			6400	
16 S Commerce Street	TOWN OF MAINT			90 /0	1 /0	1 /0	0 /6	070	0 /6		INA			0400	
	To: From:					<u></u>									
16 S Commerce Street	I own of Marion	0.05	3200 G	98%	1%	1%	0%	0%	0%	F	0.096	F	0.589	9000	
	To: From:														
16) S Commerce Street	Town of Marion	0.68 7	7800 G	98%	1%	1%	0%	0%	0%	F	0.093	F	0.528	8500	
<u>~</u>	To: From:	US 11	1 Main St												
16) (11) Main St	Town of Marion	0.08 14	4000 G	98%	1%	1%	0%	0%	0%	F	0.079	Ν	0.593	14000	
	Too	East	Main St												
16) (11) Main St	11011.	0.17 16	6000 G	98%	1%	1%	0%	0%	0%	F	0.079	F	0.593	17000	(
	Ta	Chatham F	Hill Rd: Lee St												
16) (11) Main St	Town of Marion			98%	1%	1%	0%	0%	0%	С	0.081	F	0.546	19000	
	To:	IIC 11													
16) Park Blvd				98%	0%	1%	0%	0%	0%	С	0.089	F	0.619	6200	
16) 1 4111 2114	Tar			0070	070		070	070	070	Ū	0.000		0.010	0200	
orth	From:					- 									
orth 31	Town of Marion (Maint: 86)			75%	1%	1%	1%	21%	1%	F	0.064	F		18000	
										F				35000	(
	To:	,													
lorth	From:														
81)	Town of Marion (Maint: 86)		8000 G	75%	1%	1%	1%	21%	1%	F	0.064	F		18000	(
~	Combined Traffic Estimates for 2 Parallel Roadwa			77%	1%	1%	1%	20%	1%	F	NA			35000	(
	To	S	SR 16												

Virginia Department of Transportation Traffic Engineering Division

2006 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Marion

Route	Jurisdiction Length	h AADT	T QA	A 4Tire	Rue		Trι		QC	K	QK	Dir	Λ Λ\Λ/DT	OW	
Noute	Sunsaiction Length	ואא	WΛ	41116	Dus	2Axle	3+Axle	1Trail	2Trail	QU	Factor	QIV	Factor	AAWDI	G G G
North	From:	SR 16													
(81)	Town of Marion (Maint: 86) 0.68	14000	G	75%	1%	1%	1%	21%	1%	F	0.072	F		14000	G
\bigcirc	Combined Traffic Estimates for 2 Parallel Roadways on this Route	: 31000	G	77%	1%	1%	1%	19%	1%	F	0.079	F	0.593	31000	G
	To:	NCL Mario	n												
South	From:	WCL Mario	n												
(81)	Town of Marion (Maint: 86) 0.22	17000	G	79%	1%	1%	1%	18%	1%	F	0.086	F		17000	G
	Combined Traffic Estimates for 2 Parallel Roadways on this Route	34000	G	77%	1%	1%	1%	20%	1%	F	NA			35000	G
	To:	ECL Mario	ı												
South	From:	SCL Marior	1												
(81)	Town of Marion (Maint: 86) 0.90	17000	G	79%	1%	1%	1%	18%	1%	F	0.086	F		17000	G
\smile	Combined Traffic Estimates for 2 Parallel Roadways on this Route	34000	G	77%	1%	1%	1%	20%	1%	F	NA			35000	G
	Too	SR 16													
South 81	Town of Marion (Maint: 86) 0.37	17000	G	79%	1%	1%	1%	18%	1%	F	0.083	F		17000	G
(81)	Combined Traffic Estimates for 2 Parallel Roadways on this Route		-	77%	1%	1%	1%	19%	1%		0.079		0.593	31000	_
	To:	NCL Mario	G	1170	170	176	170	1970	170	Г	0.079	Г	0.595	31000	G
			1												
	From:	Dead End		000/	201		00/	407	00/	_	0.400	_	0.007	4000	•
(217)	Town of Marion (Maint: 86) 2.20	1100	G	99%	0%	0%	0%	1%	0%	С	0.128	F	0.881	1200	G
\smile	To	SR 16													

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Virginia Department of Transportation Traffic Engineering Division 2006 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Marion

Route	Length	AADT	QA	4Tire	Bus		Trι			QC	K	QK	Dir	AAWDT	QW	Year
Town of Marion	3					2Axle	3+Axle	1Trail	2Trail		Factor		Factor			
	0.11	From NA				SC.	L Marion				NA			NA		
(F9)	0.11	Ti-				SC	L Marion							INA		
		Fron				Le	ee Street									
N Church St	0.22	1400	G	99%	0%	0%	0%	0%	0%	F	0.096	F	0.536	1500	G	2006
<u> </u>		To					ron Street									
Pto 645 Fourier St	0.02	1900	G	98%	0%		L Marion	1%	0%	С	0.094	F	0.603	2100	<u></u>	2006
2 Rte 645 Fowler St	0.02	1900 Te		90%	0%	1% Chath	0% nam Hill Ci		0%		0.094	Г	0.603	2100	G	2006
		Fron	:				nmerce St									
3 Pendleton St	0.11	4500	G	99%	0%	1%	0%	0%	0%	С	0.096	F	0.558	4900	G	2006
<u> </u>		To	:			Е	Main St									
		Fron	<u> </u>				11 Main St				<u> </u>	_				
Poston St	0.39	420	G	99%	0%	1%	0% Cherry St	0%	0%	F	0.1	F	0.606	460	G	2006
		Fron					Park St									
E Cherry St	0.21	3100	G	98%	0%	1%	0%	1%	0%	С	0.1	F	0.532	3500	G	2006
<u> </u>		To				SR 160	Commerce	St								
C Church Ct	0.77	2200	G	98%	0%	SC:	L Marion 0%	1%	0%	F	0.088	F	0.583	2400	G	2006
S Church St	0.77	2200		90%	0%				0%	Г	0.088	Г	0.563	2400	G	2006
N Church St	0.11	1500	G	99%	0%	US 11 0%	; E Main S 0%	St 0%	0%	С	0.101	F	0.515	1600	G	2006
N Church St	0.11	1300 To		3370	0 70		Lee St	070	070		0.101	•	0.515	1000	J	2000
		From				N C	Church St									
4453) Lee St	0.31	1400	G	97%	0%	2%	1%	0%	0%	С	0.098	F	0.587	1500	G	2006
		From					; N Main S ; N Main S									
4453) Chatham Hill Rd	0.15	5300	G	98%	0%	1%	0%	1%	0%	F	0.085	F	0.55	5800	G	2006
		To Fron				Chi	lhowie St									
4453) Chatham Hill Rd	1.16	2200	G	98%	0%	1%	0%	1%	0%	С	0.097	F	0.567	2400	G	2006
		To	•			NC	L Marion									
Ot-315 01	0.00	From	<u> </u>	000/	40/		L Marion	40/	00/		0.000	_	0.047	0000	0	0000
Chilhowie St	0.96	2700	G	98%	1%	1%	0%	1%	0%	С	0.086	F	0.617	2900	G	2006
Chilhowie St	0.14	1900	<u> </u>	99%	0%	Chath 0%	am Hill Ci 0%	r 0%	0%	F	NA			2000	G	2006
Chilhowie St	0.14	1900 Te	G	9970	076		Main St	0%	0%	Г				2000	G	2006
		Fron	:				Main St									
4459 Keller Lane	0.70	1100	G	99%	0%	0%	0%	0%	0%	С	0.096	F	0.562	1200	G	2006
		To	:			NC	L Marion									
$\overline{}$		Fron	:			EC	L Marion									
4461 Johnston Rd	0.15	2400	G	96%	0%	1%	0%	2%	0%	С	0.133	F	0.763	2600	G	2006
		From	<u> </u>				11 Main St									
1st Street		380	G			Lo	ook Ave				0.102	F		410	G	2006
		To				Lin	coln Ave					•				2000
		Fron	:			P	rater Ln									
Callan Lane		NA									NA			NA		
		Tr				SR 10	6 Park Blvo	i								
Ontro - Ot		From	Ĺ			Spr	inkle Ave				0.440	_	0.000	070	-	0000
Catron St		340	G			X 7	olfe Ave				0.112	F	0.682	370	G	2006
		Fron					scott Ave									
Catron St		620	G								0.103	F	0.568	680	G	2006
		To				Chi	lhowie St									
0 1 1 1 1		From				Cli	nton Ave					-	0.0:-			
Cumberland St		330 Tr	G			** *	1do1- *				0.116	F	0.648	360	G	2006
		17	<u> </u>			Hul	ldale Ave									

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Virginia Department of Transportation Traffic Engineering Division 2006 Annual Average Daily Traffic Volume Estimates By Section of Route Town of Marion

					I owr	n of Mario	n								
Route	Length AADT	QA	4Tire	Bus		Tru 3+Axle			QC	K Factor	QK	Dir Factor	AAWDT	QW	Year
own of Marion	From:	i			Hu	lldale Ave				1					
Dalton St	260	G			Tiu	iluaic Ave				0.144	F	0.625	290	G	2006
2 3.13.1 31	To	Ť			Gr	eenway St				Ť	•	0.020		•	2000
	From:	ì				agnolia St				i					
Dogwood Dr	130	G			141	agnona st				0.155	F	0.544	140	G	2006
3	To:				D	ead End								_	
	From:	l			Δ	Action Pl				Ì					
E Main St	1200	G								0.085	F	0.693	1400	G	2006
	To:					Oak St									
	From:				Cun	nberland St									
Hulldale Ave	49	G								0.175	F	0.6	50	G	2006
	To:				D	ead End									
	From:				1	st Street									
Look Ave	480	G				St Bucci				0.093	F	0.514	530	G	2006
	To:				Ch	ilhowie St								_	
	From:				Do	gwood Dr									
Magnolia St	200	G			В	gwood Di				0.119	F	0.5	220	G	2006
3	To				**	1 10				_				G G G	
Magnolia St	From: 260	G			He	emlock St				0.125	F	0.52	280	G	2006
Wagi lolla St	200 To:	<u> </u>			V	eteran St				0.123	'	0.52	200	G	2000
	From:									+					
Mt View Dr	180	G			G	olf View				0.103	F	0.558	200	G	2006
IVIL VIEW DI	To:				Cour	ntry Club Rd	ĺ			0.103		0.556	200	G	2000
	From:	<u> </u>													
Park St	460	G				Cherry St				0.094	F	0.555	510	G	200
Paik St	400 To-				Dead Fr	nd S Of Che	array			0.094	Г	0.555	310	G	2006
	From:	l					11 y								
Patton Ave	80	G			Cun	nberland St				0.201	F	0.632	90	0	2006
Fallon Ave	OU To:				Г	Dead End				0.201	Г	0.032	90	G	2000
	From	<u> </u>													
Doorl Ct		<u> </u>			E.	Cherry St				0110	_	0.556	600	G	2000
Pearl St	550 _{To:}	G			E	Hiigh St				0.118	F	0.556	56 600		2000
		<u> </u>								+					
Dan dlatan Ot	From:	<u> </u>				Main St				0.007	_	0.547	F000	0	2000
Pendleton St	4700 _{To:}	G			Con	mmerce St				0.087	F	0.517	5200	G	2006
		!								1					
Drotor Ctroot	From:				Spi	rinkle Ave							NΙΔ		
Prater Street	NA	r				'allan Ln				NA			NA		
C Inna Ct	From:	<u> </u>			Е	High St				0.007	_	0.507	4000	0	2000
S Iron St	940 To-	G			**	7-1 C4				0.087	F	0.527	1000	G	2006
						Valnut St									
14/	From:	<u> </u>			W	assona Dr				0.000	_	0.000	4 400	_	000
Wassona Dr	1300	G								0.098	F	0.608	1400	G	2006
	To: From:					emlock St									
Wassona Dr	1400	G	99%	0%	0%	0%	0%	0%	С	0.11	F	0.508	1600	G	2006
	To:				V	eteran St									
	From:				C	Oakley St									
Wolfe Ave	300	G								0.105	F	0.507	330	G	2006
	To:				Ι	Dover St									

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